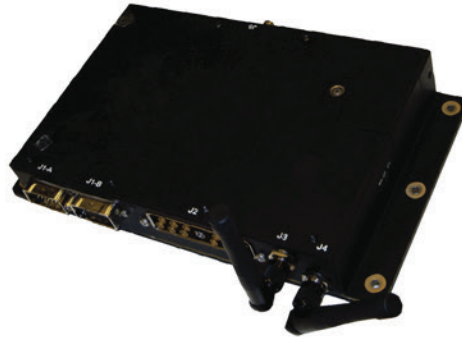


AIRCRAFT WIRELESS LAN UNIT



Extend The Reach of Your Network with Global Cellular and WiFi Connectivity

Teledyne Controls' Aircraft Wireless LAN Unit is a compact, lightweight and cost-effective networking solution that provides high performance, off-board wireless connectivity for Onboard Network System (ONS) applications while on the ground. The Aircraft Wireless LAN Unit provides 3G/HSPA+ cellular connectivity, as well as a Wi-Fi option.

Standard Cellular Connectivity

The Aircraft Wireless LAN Unit solution includes two HSPA+ modules with downlink speeds (toward the aircraft) up to 21 Mbps and uplink speeds (away from the aircraft) up to 5.76 Mbps. It also provides fallback capability to HSPA, EDGE and GPRS. The Aircraft Wireless LAN Unit solution offers truly global connectivity, operating both in the 3G and GPRS/EDGE frequency bands.

The cellular antenna(s) are attached to the unit, which eliminates the need for fuselage-mounted antennas. The Aircraft Wireless LAN Unit system leverages Teledyne's decade of experience with cellular connectivity, sharing the same technology as the Wireless GroundLink® Comm+ system, a proven solution in commercial service at many airlines worldwide, and certified on all major aircraft types.

Optional WiFi Connectivity

Also available with a Wi-Fi option, the Aircraft Wireless LAN Unit system provides an ARINC 822 compliant IEEE 802.11 a/b/g/n radio capable of operating in the 2.4 GHz frequency band. This Wi-Fi option is compliant with the latest relevant IEEE and ARINC standards.

System Integrity And Reliability

The Aircraft Wireless LAN Unit device is not repackaged COTS equipment, but purposefully built for avionics use. It features the same hardware platform that Teledyne's Network Extension Device (NED) and Network File Server (NFS) relies upon, thus sharing the same environmental characteristics and obsolescence management required for the components of the ONS. This makes it a logical choice when extending the ONS onboard network to off-board wireless LANs and WANs.

System Integration And Management

The Aircraft Wireless LAN Unit is a versatile system that can be connected directly to the ONS via a SOAP interface. It is also 615A data loadable via the ONS interface.

Key Features

- Cellular connectivity, plus WiFi option
- Operates in the 850/900/1900/2100 MHz 3G frequency
- Operates in the 850/900/1800/1900 MHz GPRS/EDGE frequency
- HSPA+ cellular connectivity provides up to 21 Mbps peak throughput per radio
- WiFi supports IEEE 802.11 a/b/g/n, WPA/WPA2 security and all popular EAP methods, including TLS and Cisco EAP-FAST
- Ethernet switch with IEEE 802.11q VLAN support
- NED I/O maintained for future growth
- Removable Compact Flash card
- Configurable firewall security

Characteristics

- Size: 11.45" L x 6.45" W x 1.82" H
290 mm x 164 mm x 46 mm
- Weight: 4 lbs / 1.82 kg
- Power: 30 watts max at 115VAC 400Hz
- Power Factor: 0.90
- Meets DO-160E category A2 environment

ONS Interface Block Diagram

